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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/095,789 06/11/98 CHO

G CYNO-4

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EXAMINER

QM12/0817

DONALD HALGREN
35 CENTRAL STREET
MANCHESTER MA 01944

YARNELL, B

ART UNIT

PAPER NUMBER

3739

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DATE MAILED:

08/17/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/095,789

Applicant(s)

Cho et al.

Examiner

Bryan Yarnell

Group Art Unit
3739



☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-12 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-12 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-5 and 8-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Furumoto et al. (US Patent No. 5,624,435). Furumoto et al. teaches a pulse dye laser therapy for the treatment of vascular lesions. Furthermore, according to column 4, lines 53-57, the lesion can include vessels underlying wrinkles. Also, according to column 1, lines 53-61, conventional dye lasers emit in a range of at least from 577 to 585 nm. These wavelengths are stated to be preferred in order to match the absorption band of hemoglobin. In addition, according to column 4, lines 58-65, the pulse duration produced should be greater than 0.2 msec, and preferably between 1 msec to 10 msec. The above parameters are within the claimed limitations. Thus, Furumoto et al. is regarded as teaching a method for the treatment of wrinkles by stimulating collagen, since the treatment parameters are similar. Furthermore, operation at a pulse width of 1 msec is regarded to be about 450 microsec., or 0.45 msec. Finally, since the above parameters are within the claimed limitations, it is believed that the treatment would extend to a depth of at least between 1.0 mm and 1.2 mm below the surface of the skin.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eckhouse (US Patent No. 5,720,772) in view of Furumoto et al. (US Patent No. 5,624,435). Eckhouse teaches a light treatment device in which according to column 18, lines 20-27, can be used for skin rejuvenation or the treatment of wrinkles. The emphasis of the teachings are in the use of an incoherent flashlamp for the treatment. However, column 16, lines 32-34, suggests that a pulsed laser source could be used in place of the flashlamp. Additionally, according to column 5, lines 24 and 25, the source of light emits in the range of 300 to 1000 nm. Also, according to column 7, lines 21 and 22, the pulse width used is between 10^{-5} and 10^{-1} sec. In addition, column 8, lines 30-37, states that the energy density used should be within 0.5 to 10 J/cm². Therefore, it would have been obvious to one skilled in the art to operate within these ranges in order to effect treatment of wrinkles using known laser parameters. Also, according to column 6, lines 11-25, the light directed to the tissue can be controlled with an iris, 20, such that the width and length of the treatment area is controlled from a width of 1 to 5 mm and a length of from 1 mm to 5 cm. Therefore, it is the position of the Examiner, that it would have been obvious to one skilled in the art to operate with a diameter of about 10 mm as an alternative treatment area that lies within the ~7mm

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treatment area stated by Eckhouse. Finally, since the above parameters are within the claimed limitations, it is believed that the treatment would extend to a depth of at least between 1.0 mm and 1.2 mm below the surface of the skin. Eckhouse does not teach that the source of light is from a pulsed dye laser.

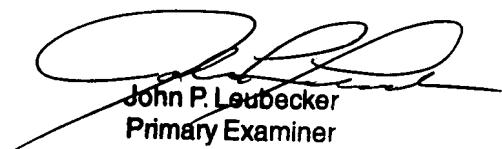
Furumoto et al. teaches a pulse dye laser therapy for the treatment of vascular lesions. Furthermore, according to column 4, lines 53-57, the lesion can include vessels underlying wrinkles. Therefore, it would have been obvious to one skilled in the art to modify the teachings of Eckhouse with Furumoto et al. to provide a pulsed dye laser as an alternative, equivalent source of light for the treatment of wrinkles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan Yarnell whose telephone number is (703) 308-3173. The examiner can normally be reached on Monday through Thursday from 7:30 am to 5:00 pm and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak, can be reached on (703) 308-0994.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0858. The official facsimile transmission number for this art unit is (703) 305-3590.

bky
Aug. 12, 1999


John P. Leubecker
Primary Examiner